Do Only the Strong Survive? Exploring Adversity and Resilience in Later Life

By Lydia Manning, PhD

Traversing a life course promises that an individual will encounter a multitude of life events, and for some individuals these life events will be sources of hardship, adversity, or even trauma. What determines whether people thrive or survive when encountering these events? What circumstances increase the likelihood of having resilience, or the capacity to maneuver through adversity in a manner that protects health and well-being? Inner strength? Motivation? Luck?

In Memoriam

Cecil Murray Long died on January 25, 2013, at age 85. He was born in Lincoln, Georgia, and graduated from Rhinehardt Jr. College in 1946 and joined the Air Force. While stationed with the R.O.T.C. at UNC Chapel Hill, he completed his education with a B.S. degree in Business Administration. Retiring after 20 years of service in the Air Force, he joined the staff of the Duke Medical Center in 1966. After 24 years as Business Manager for the Psychiatry Department, he worked part time as Business Manager for the Center for the Study of Aging for 14 years, retiring in 2004.

Long was active in several churches. He was instrumental in building Forest Grove Chapel on U.S. 15-501 south of Chapel Hill. He was an elder and did much of the teaching there for 30 years. He continued to be helpful in establishing the Chapel Hill Wesleyan Church for 12 years and since 2001, until his illness, his attendance was at Farrington Road Baptist Church.

In 1973, a fan of Southern Gospel music, he attended many concerts including National Quartet Conventions and the Grand Ole Opry Reunions. He was an avid golfer and a Tar Heel fan. He will be remembered as an excellent Business Manager for the Department of Psychiatry and the Center on Aging, and as a wonderful husband, father, grandfather, and friend and mentor for many people.

Exploring resilience requires us to explore how individuals recover from distressing events and persist through extreme adversities, while negotiating everyday aspirations and challenges in life.

Although aging affords many opportunities for growth and transformation, growing older also presents inherent challenges and complexities associated with adversity and hardship. Resilient individuals are those who effectively and efficiently navigate these challenges.

I argue that enduring hardship and adversity is largely influenced by self-perceived emotional strength and resilience. According to my data and interviews with 65 elders, this notion of self-perceived strength is an under-
The Built Environment and Neighborhood Social Relations

Katherine King, PhD

The urban planning paradigm “New Urbanism” promotes the view that walkable neighborhoods foster social interaction among neighbors by increasing chance encounters when people walk. Previous research links better social relations in communities with reduced health, social, and behavioral risks.

Neighboring relationships include cohesion (a sense of closeness among neighbors), control (willingness to intervene when shared problems occur), intergenerational closure (relationships across generations), and reciprocal exchange (visits, favors, and information sharing).

Prior studies had simple designs or were not set in large U.S. cities. The present study uses a representative sample of 3,105 Chicago adults and detailed information on physical and social features of their residential neighborhoods.

Physical features of these urban neighborhoods including housing and walkable urban form, along with social composition and residential stability, predicted how neighborhood residents perceive local social relations. Those living near detached houses reported better relations, while those near high-rise apartments reported worse relations. High turnover in apartment communities is likely a major explanation. Walkable urban form (residential density, mixed land use, and street connectivity) appears less important but shows promise in predicting reciprocal exchange. The detrimental effect of apartment-dwelling was worse in socially disadvantaged areas. A gradual pace of redevelopment resulting in historical diversity of housing also significantly predicts better social relations.

The finding that physical conditions like housing and urban form have implications for social relations should encourage efforts to develop urban planning policies designed to foster neighborly social relations along with other related beneficial outcomes. Researchers seeking to promote community social relations should seek common ground with others seeking to promote physical activity, reduced carbon emissions, access to health resources, and other urban design features linked with health and quality of life. Further investigation is also needed to understand how walkable design may affect older adults with functional limitations.
Can Wrinkles Be Removed?

Most of the over-the-counter “wrinkle removers” and “skin rejuvenators” have no scientific evidence to support their claims. Their effectiveness is supported only by testimonials and anecdotes — and it’s easy to pay people to testify that any nostrum is “marvelously” effective.

Tretinoin (Retin-A) is the only topical medication that has been proven to temporarily reduce wrinkles. However, tretinoin increases sensitivity to sunlight, so you need to avoid sunlight or use protective clothing when using it. Also there are side effects such as peeling, dry skin, burning, itching, and redness. All these problems raise the question as to whether it is worthwhile.

So yes, wrinkles can be temporarily removed in several ways: Botox, cosmetic surgery, chemical peels, and laser resurfacing. The main problem with all these methods is they are dangerous. Botox treatments are especially dangerous because they involve injection of the Botulinum Toxin under the skin in the area of the wrinkles, which paralyses the muscles and gives the appearance of smoother skin. (A side-effect is a mask-like appearance because of the paralyzed facial muscles.) However, the effect lasts for only a few weeks or months at most, after which the wrinkles reappear.

Furthermore, there have been over 180 reports of adverse side effects, including 16 deaths.

Face lifts and other types of plastic surgery are also dangerous because they are invasive surgery. This means that there are the unavoidable dangers of infection, side effects of anesthesia, etc. of any invasive surgery. Furthermore, you probably need to repeat the facelift in a few years if you want to prevent the return of your wrinkles.

Chemical peels and laser resurfacing involve destroying the outer surface of the skin and waiting for it to grow back, which involves considerably pain and redness.

Since all these procedures have only temporary effects, the short answer is, wrinkles cannot be removed permanently.

*Adapted from Palmore, Older Can Be Bolder, Amazon, 2011.
Understanding Periodontal Disease Trajectories Among Older Americans: Does Social Stratification Matter?

Disparities in oral health in terms of social stratification (i.e., age, gender, race, and socioeconomic status) are well recognized. However, limited information is available on how oral health changes over an extended period of time and little understanding of how oral health trajectories vary across social stratification. This study charted the trajectories of periodontal disease among older Americans and analyzed how they are related to social stratification.

Data came from the Duke Established Population for Epidemiologic Studies of the Elderly (EPESE), and the Piedmont Dental Study (PDS). The study sample included 810 dentate individuals aged 65 and over in five communities in North Carolina from 1988 to 1994 with 4 waves of panel study over 5 years. Periodontal disease was measured by two variables, attachment loss (AL ≥ 4mm) and pocket depth (PD ≥ 3mm) through dental examination. Hierarchical linear models with binomial logit regression were used to evaluate the relationships between social stratification and trajectories of periodontal disease. Although attachment loss and pocket depth were positively correlated, they exhibited distinct trajectories. Over time, the risk for attachment loss increased, while the odds of pocket depth decreased in an accelerated fashion. Social stratification (i.e., age, gender, race, education, and household income) was significantly associated with the levels of both attachment loss and pocket depth but not their rates of change. All measures of social stratification related to attachment loss and pocket depth in a similar fashion, with the exception of age. In particular, for both attachment loss and pocket depth, a lower risk was associated with female gender, being white, higher education, and income. In contrast, the risk of attachment loss increased with age, whereas the odds of pocket depth decreased as one became older. Attrition and mortality matter in the estimation of trajectory of attachment loss but not pocket depth. The effects of social stratification remain robust with the adjustment of attrition and mortality. The observation of oral health disparities may be extended to the dynamics of periodontal disease. New knowledge on the intrapersonal and interpersonal differences in oral health among older adults indicators would aid oral health promotion and delivery of dental care. Further research is needed to examine how the trajectories of periodontal disease and those of dental caries interface with one another. In addition, additional observations over longer period of time would be desirable.

*Jersey Liang, Bei Wu, Brenda Plassman, Joan Bennett, and Jim Beck. Trajectories of periodontal disease among older Americans. Does social stratification matter? Presented at the 2012 GSA annual meetings with support from NIH/NIDCR (R01DE019110. PI: Bei Wu).
As I write this, our nation has successfully avoided the “Fiscal Cliff” of 2012. But another cliff looms as debate on cutting spending or raising the national debt gets underway. One of the frequent proposals to avoid that cliff is to cut Social Security benefits in various ways, such as raising the retirement age or privatizing Social Security. These proposals are often based on myths about Social Security such as:

- Social Security is causing the deficit.
- Social Security is going bankrupt because of the Baby Boomers.
- Most people do not need Social Security.
- There are no viable alternatives.

Here are the facts.

Cutting Social Security would not reduce the deficit. The money we have all paid into Social Security will keep it fully funded until at least 2043, and after that 80 percent funded.

The future shortfall is only a blip. After the Baby Boomers reap their Social Security benefits, the system will return to full solvency, because the Boomers have had the fewest children ever and so the system will pay benefits to fewer people.

Social Security remains indispensable in enabling 38 million senior citizens to live their lives in dignity. Without Social Security probably about half of Americans age 65 or older would be below the poverty line. For one-third, Social Security provides nearly all of their income.

There are several viable options for reducing the deficit. Some of the most viable options include taxing all earnings, reducing the bloated defense budget, reducing loopholes in the tax law, and reducing tax breaks for U.S. corporations doing business overseas.

Yes, the deficit needs to be cut, but not based on myths about Social Security and not at the cost of our senior citizens.

*Partly based on “Hands Off Social Security” by Robert Weiner and Jonathan Battaglia, Truthout, 8/9/2012. The opinions expressed here are those of the author and not necessarily of the Center for the Study of Aging.*
Physical Activity Counseling Improves Well-Being

By Katherine S. Hall, PhD

Posttraumatic stress disorder (PTSD), a psychological disorder linked to negative health outcomes, affects over 15% of Vietnam War veterans. Vietnam-era veterans now constitute the 65+ patient population within the Veterans Health Administration (VHA). To date, little work has been done to examine the relationship between PTSD, physical activity (PA), and physical and psychological well-being in older veterans.

We used secondary data analysis of an ongoing 12-month randomized, controlled PA counseling intervention for older, overweight veterans with impaired glucose tolerance. 302 older veterans (>60 years) participated in the trial. 22% (n=67) of the study sample had PTSD. The statistical significance of both the Group and Group by Time interactions were assessed between those with and without PTSD. Physical performance and psychosocial functioning were assessed.

Significant pre-post improvements were observed for vitality, minutes of PA, satisfaction with physical function, aerobic endurance, and number of symptoms among those with PTSD. After adjusting for age, the pre-post magnitude of change in those with PTSD was significantly greater than those without PTSD on measures of role-emotional health, physical function, satisfaction with function, and aerobic endurance.

Participants with PTSD had significantly greater improvements in vitality, physical function, and aerobic endurance compared to those with PTSD randomized to Usual Care. Conclusions: These preliminary results suggest that older veterans with PTSD have significant impairments, and where these impairments exist, we see meaningful improvements over time with intervention. Older veterans with PTSD are just as capable of improvement as others and further investigation is warranted.
This is a Catch-22 situation since there is no such thing as a perfect test. As a society we are eager to catch diseases early (preferably at the pre-symptomatic stage) but we don’t want tests that perform imperfectly. This means that we will have to wait forever till a test is perfectly validated or if we introduce a test quickly we run the risk of having to withdraw it if it is misused.

National health-care plans like those in the U.K. are slow to introduce screening tests that are not cost effective at a societal level but they pay a price in that many diseases are caught at later stages. Capitalistic societies like the U.S. take the latter approach but pay a price in the form of a huge volume of unnecessary testing and surgery to save a few lives. Most screening tests are not as well validated as we would like to have the public believe. Let’s take even the basic annual physical exam which has been done for decades on the assumption that this is lifesaving. A recent pooled analysis of 183,000 people across 14 studies in the U.S. and Europe found that nine-year death rates were identical in those who underwent regular physical checkups and lifestyle counseling versus those who did not.

Dr. P. Murali Doraiswamy is professor of psychiatry and medicine at Duke University Medical Center where he also serves as a member of the Duke Institute of Brain Sciences and as a senior fellow at the Duke Center for the Study of Aging and Human Development.
CONTINUED FROM PAGE 1

Do Only the Strong Survive? Exploring Adversity and Resilience in Later Life

lying component of resilience. In this research, I explore how older adults manage hardship and adversity as they age. Using grounded theory analysis of 65 qualitative interviews with older adults age 53 to 94, I investigated the process of resilience for my participants. In this study, I examine the key factors of resilience in later life. My findings indicate that resilient elders engage in five key behaviors when navigating hardship: adversity confrontation, problem re-framing, resource mapping, self-preservation, and embracing uncertainty.

Participants discussed their management strategies for confronting adversity; they talked openly about how they see adversity as an opportunity for growth and expansion. Interviews revealed how participants intentionally mapped their life resources, mining for social support and tapping into the benefits of human connection. Participants also discussed the importance of practicing radical self-care and compassion, especially in the face of uncertainty. I was struck by how comfortable my participants were with ambiguity, lack of control, and vulnerability. The elders I interviewed articulated that for them being strong and having resilience meant being able to dwell comfortably and peacefully with the uncertainty embedded in their lives and to embrace their vulnerability as people, particularly as they grow older. An overarching theme linking these behaviors was the magnitude and frequency in how participants conceptualized themselves as having emotional strength, exhibiting resilience, and being survivors: “Of course I am resilient, I am here aren’t I? If I weren’t a survivor, I would have given up a long time ago. The older I get, the more I see myself as being resilient.”

This work contributes to resilience research by offering a multi-disciplinary perspective that examines the dynamics of resilience over the life course. Currently, I am working to translate my research into opportunities that elders can utilize for increasing and enhancing their resilience. This research was presented at the 2012 Gerontological Society of America (GSA) meetings in San Diego, CA.

Zeng Paper Receives Award

Professor Yi Zeng and his colleagues received the Paper of the Year Award from the American Journal of Public Health for their paper on “Associations of Environmental Factors with Elderly Health and Mortality in China.” The award is for papers that “address important and timely public health issues; are innovative, offering new knowledge or insights, and have the potential to have significant impacts on public health.”

The paper found significant relationships between mortality and indicators of quality of life with per capita local gross domestic product, illiteracy, labor force participation, air pollution, and several other predictors. It underscores stresses faced by elderly populations living in rapidly urbanizing and industrializing economies.

Zeng is a professor in the Center for Demographic Studies and a Senior Fellow at the Center for the Study of Aging. The co-authors of the paper are Danan Gu, Jama Purser, Helen Hoeing, and Nicholas Christakis.
Coming Events

May 3–5, 2013

May 22–25, 2013
7th Congress on Men’s Health and Aging at Hamburg, Germany. Contact: http://www2.kenes.com/issam/info/Pages/AboutHamburg.aspx.

June 23–27, 2013

November 20–24
“Optimal Aging through Research” Annual Scientific Meeting of the Gerontological Society of America in New Orleans, LA. www.geron.org/annual-meeting.